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10/10

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,865	11/16/2000	Diego H Castrillon	B0801/7195	4880
7590	06/18/2004		EXAMINER	
			CANELLA, KAREN A	
			ART UNIT	PAPER NUMBER
			1642	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/714,865	CASTRILLON, DIEGO H
Examiner	Art Unit	
Karen A Canella	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 and 22 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1 and 2 is/are allowed.
- 6) Claim(s) 3,4 and 22 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: Attachment

## DETAILED ACTION

Claim 4 has been amended in the amendment filed May 15, 2004. Claims 1-4 and 22 are pending and under consideration.

After review and reconsideration, the finality of the previous Office action is withdrawn.

Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 22 is drawn to a kit comprising “an agent” that selectively binds to the isolated nucleic acid of claim 1. When given the broadest reasonable interpretation, the claims read on DNA binding enzymes, and other molecules which are not restricted to nucleic acids which hybridize to SEQ ID NO:1. The specification discloses only nucleic acids which hybridize to SEQ ID NO:1 and thus does not adequately describe a genus of “agents”.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for SEQ ID NO:15, does not reasonably provide enablement for fragments of SEQ ID NO:15. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claim 15 embodies the isolated nucleic acids of claim 1 which hybridize under stringent conditions to SEQ ID NO:1 and code for a human vasa polypeptide. The specification teaches that vasa polypeptides are restricted to expression in germ cells and tumors thereof. The specification has not provided teaching of a subfragment of SEQ ID NO:15 which would encode a vasa polypeptide. One of skill in the art would be subject to undue experimentation in order to make a subfragment of SEQ ID NO:15 that would be expressed only in germ cells.

Claim 4 is rejected under 35 U.S.C. 102(e) as being anticipated by Edwards (US 6,636,063) as evidenced by the attached sequence alignment. Edwards discloses SEQ ID

NOI:2923 which is an isolated DNA fragment of SEQ ID NO:1 of 504 nucleic acids, thus fulfilling the specific embodiment of between 8 and 2223 nucleotides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen A Canella whose telephone number is (571)272-0828. The examiner can normally be reached on 10 a.m. to 9 p.m. M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571)272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**KAREN A. CANELLA PH.D**  
**PRIMARY EXAMINER**

Karen A. Canella, Ph.D.

06/17/2004

GenCore version 5.1.6  
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Om nucleic - nucleic search, using sw model

Run on: May 9, 2004, 15:44:13 ; Search time 167.964 Seconds  
(without alignments)

7348.085 Million cell updates/sec

Title: US-09-714-865-1

Perfect score: 2224

Sequence: 1 acttgaaggccaaatggggggggggggggatcgca 2224

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents NA:\*

1: /cn2\_6\_ptodata/2/ina/5A\_COMB.seq: \*  
2: /cn2\_6\_ptodata/2/ina/5B\_COMB.seq: \*  
3: /cn2\_6\_ptodata/2/ina/6A\_COMB.seq: \*  
4: /cn2\_6\_ptodata/2/ina/6B\_COMB.seq: \*  
5: /cn2\_6\_ptodata/2/ina/PCBTS\_COMB.seq: \*  
6: /cn2\_6\_ptodata/2/ina/backfileseq: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description	
1	493	22.2	504	4 US-09-621-976-2923	Sequence 2/23, App	
2	399.8	17.5	420	4 US-09-833-381-1475	Sequence 14/5, App	
3	386.4	17.4	2451	4 US-09-976-594-786	Sequence 786, App	
4	383.2	17.2	2319	3 US-09-058-489-90	Sequence 90, App	
5	383.2	17.2	4416	3 US-09-058-489-17	Sequence 17, App	
6	369.4	16.6	3408	3 US-09-058-489-14	Sequence 14, App	
7	369.4	16.6	5322	3 US-09-058-489-13	Sequence 13, App	
8	158.2	7.1	2365	3 US-09-183-706-42	Sequence 42, App	
9	158.2	7.1	2365	4 US-09-567-995-42	Sequence 42, App	
10	129.4	5.8	1191	4 US-09-328-552-509	Sequence 509, App	
11	129	5.8	3760	4 US-09-567-994-213	Sequence 213, App	
12	127.6	5.7	1410	4 US-09-543-681A-1401	Sequence 1401, App	
c	13	5.6	1830121	4 US-09-543-884-1	Sequence 1, App	
c	14	125.6	5.6	1830121	4 US-09-643-990A-1	Sequence 1, App
c	15	123.6	5.6	1234	5 PCT-US96-05320A-894	Sequence 894, App
16	5.6	1830121	4 US-09-557-884-1	Sequence 1, App		
17	123.6	5.6	1830121	4 US-09-643-990A-1	Sequence 1, App	
c	18	116.8	5.3	3230	4 US-08-961-527-203	Sequence 203, App
c	19	115.2	5.2	3347	4 US-09-702-705-318	Sequence 318, App
c	20	115.2	5.2	3347	4 US-09-736-557-318	Sequence 318, App
c	21	115.2	5.2	3347	4 US-09-614-124B-118	Sequence 318, App
c	22	115.2	5.2	3347	4 US-09-671-125-318	Sequence 318, App
c	23	115.2	5.2	3347	4 US-09-589-184-318	Sequence 318, App
c	24	115.2	5.1	3825	3 US-09-742-742-3	Sequence 3, App
c	25	113.4	5.1	1317	4 US-09-543-881A-195	Sequence 195, App
c	26	110.4	5.0	4513	4 US-09-596-602-22	Sequence 22, App
c	27	110	4.9	1941	4 US-09-328-352-1891	Sequence 1891, App

#### ALIGNMENTS

c	28	109.6	4.9	573	4 US-09-702-705-1384	Sequence 1384, App
c	29	109.6	4.9	573	4 US-09-614-124B-1384	Sequence 1384, App
c	30	109.6	4.9	573	4 US-09-671-125-1384	Sequence 1384, App
c	31	109.6	4.9	7363	4 US-08-956-171B-19	Sequence 19, App
c	32	106	4.8	7363	4 US-09-976-594-788	Sequence 788, App
c	33	104.4	4.7	905	4 US-09-134-001C-1425	Sequence 1425, App
c	34	103.2	4.6	1587	4 US-09-343-1	Sequence 1425, App
c	35	92.2	4.1	1245	3 US-09-454-681A-3545	Sequence 3545, App
c	36	92	4.1	1365	4 US-09-134-001C-816	Sequence 816, App
c	37	91.2	4.1	1366	4 US-09-596-002-29	Sequence 29, App
c	38	91.2	4.1	6986	4 US-09-311-294B-3206	Sequence 3206, App
c	39	91	4.1	267	4 US-09-222-575-1126	Sequence 126, App
c	40	90.8	4.1	490	4 US-09-389-681-126	Sequence 126, App
c	41	90.8	4.1	490	4 US-09-620-405B-1126	Sequence 126, App
c	42	90.8	4.1	490	4 US-09-339-338B-126	Sequence 126, App
c	43	90.8	4.1	490	4 US-09-433-826B-126	Sequence 126, App
c	44	90.8	4.1	490	4 US-09-604-287A-126	Sequence 126, App
c	45	90.8	4.1	490	4 US-09-604-287A-126	Sequence 126, App

c	46	90.8	4.1	490	4 US-09-621-976-2923	RESULT 1
c	47	90.8	4.1	490	4 US-09-621-976-2923	US-09-621-976-2923
c	48	90.8	4.1	490	4 US-09-621-976-2923	Sequence 2923, Application US/09621976
c	49	90.8	4.1	490	4 US-09-621-976-2923	Patent No. 663903
c	50	90.8	4.1	490	4 US-09-621-976-2923	GENERAL INFORMATION:
c	51	90.8	4.1	490	4 US-09-621-976-2923	APPLICANT: Dumas Milne Edwards, J.B.
c	52	90.8	4.1	490	4 US-09-621-976-2923	APPLICANT: Jober, S.
c	53	90.8	4.1	490	4 US-09-621-976-2923	APPLICANT: Giordano, J.V.
c	54	90.8	4.1	490	4 US-09-621-976-2923	TITLE OF INVENTION: ESTS and Encoded Human Proteins.
c	55	90.8	4.1	490	4 US-09-621-976-2923	FILE REFERENCE: GENSET_054PR2
c	56	90.8	4.1	490	4 US-09-621-976-2923	CURRENT APPLICATION NUMBER: US/09/621,976
c	57	90.8	4.1	490	4 US-09-621-976-2923	CURRENT FILING DATE: 2000-07-21
c	58	90.8	4.1	490	4 US-09-621-976-2923	NUMBER OF SEQ ID NOS: 19335
c	59	90.8	4.1	490	4 US-09-621-976-2923	SOFTWARE: Patent .pm
c	60	90.8	4.1	490	4 US-09-621-976-2923	SEQ ID NO: 2923
c	61	90.8	4.1	490	4 US-09-621-976-2923	TYPE: DNA
c	62	90.8	4.1	490	4 US-09-621-976-2923	ORGANISM: Homo sapiens
c	63	90.8	4.1	490	4 US-09-621-976-2923	FEATURE:
c	64	90.8	4.1	490	4 US-09-621-976-2923	NAME/KEY: CDS
c	65	90.8	4.1	490	4 US-09-621-976-2923	LOCATION: 224..472

RESULT 2

US-09-833-381-1475

Sequence 1475, Application US/09833381

GENERAL INFORMATION: Patent No. 6672186

APPLICANT: Robison, Keith E.

TITLE OF INVENTION: No. 6672186el Nucleic Acid and Protein Homologs

CURRENT APPLICATION NUMBER: 5800-119

CURRENT FILING DATE: 2001-04-11

PRIOR FILING DATE: 2000-02-29

NUMBER OF SEQ ID NOS: 2050

SOFTWARE: FASTSEQ for Windows Version 3.0

SEQ ID NO: 1475

LENGTH: 420

TYPE: DNA

ORGANISM: Homo sapiens

US-09-833-381-1475

Query Match, 17.5%; Score 389.8; DB 4; Length 420;

Best Local Similarity 99.5%; Pred. No. 9-10/4; Indels 0; Gaps 0;

Matches 391; Conservative 0; Mismatches 2;

Qy 818 GACAAATGGACACTATCTTGTGGAATCTGTGCAATGTGACACCAACTCTG 877

Db 28 GTCAAATGGACACTATCTTGTGGAATCTGTGCAATGTGACACCAACTCTG 87

Qy 878 ACTTTGAGAAGCTTAATCTGTGACACTGAATAACATTTGCTAAAGCTGGTT 937

Db 98 ACTTTGAGAAGCTTAATCTGTGACACTGAATAACATTTGCTAAAGCTGGTT 147

Qy 938 ACTTAACTCTCTGTGCAAAATACTGTTCTCATACTTGGGACGAGATTG 997

Db 148 ACTAAGCTTACTCTCTGTGCAAAATACTGTTCTCATACTTGGGACGAGATTG 207

Qy 998 ATGGCTTGCTCAAACAGGGCTCGGGAGACTCGGCCCTCTCCPACCAATTCTGC 1057

Db 208 ATGGCTTGCTCAAACAGGGCTCGGGCTCTCCPACCAATTCTGC 267

Qy 1058 CATATGATGATGTTGAAACTGCAAGTTGTCACCGATTATTGGAGCCGAAATT 1117

Db 268 CATATGATGATGTTGAAACTGCAAGTTGTCACCGATTATTGGAGCCGAAATT 327

Qy 1118 ATTATTTGGGACTCTGAGANTGTCACCGATTATTGGAGCCGAAATT 1177

Db 328 ATTATTTGGGACTCTGAGANTGTCACCGATTATTGGAGCCGAAATT 387

Qy 1178 TCTTTGGGACTCTGAGANTGTCACCGATTATTGGAGCCGAAATT 1210

Db 388 TCTTTGGGACTCTGAGANTGTCACCGATTATTGGAGCCGAAATT 420

Query Match, 17.4%; Score 386.4; DB 4; Length 2451;

Best Local Similarity 58.7%; Pred. No. 2.7e-10/2; Indels 36; Gaps 4;

Matches 763; Conservative 0; Mismatches 501; Indels 36; Gaps 4;

Qy 801 AGACAGGCTAAACTTCGACAAATTAGACACTATTCTGTGAAAGTGTCTGACATATG 860

Db 503 ACACGGGGTTAACTTGAGAAATATGTGATAACCTAGAGCCACCGGAGTTACT 562

Qy 861 CACCAACCAAACTTGACTTTGAAGAGCTATCTTGTCAGACACTGATAACACA 920

Db 563 GTCCCTCCATATGAGAAATTAGCTGATTCACGGTATTCACGGAAATTATCAGGGAGACA 622

Qy 921 TTGCTAAAGCTGGTTATACTAACTTAACTCCTGTGCAAATAACAGTATTCCTATCATA 980

Db 623 TTGAATTCCTGTATATCTGCTACTCCAGTCAGATTCAGGTTATTCACGGAAATTATTA 682

Qy 981 TTGCTAGGAGAGATTGTGCTCAACAGGGCTCTGGAAAGTCTGGCTTTTC 1040

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Qy 1041 TCCCTACCAATTGGCTCA-----TATGATGCTATGATG 1073

Db 743 TTTTACCAACTAGTCGATATAACAGTATGGCTCA-----TTGGCTCA 802

Qy 1074 GAATACTGCGAGCTGTTAAAGCTGGAGATGTTATTGAGCAGCTGAAACCCGACAA 1133

Db 803 AGGTAAATGGAAAGCTATGGGGCCGGCAAACAAATTATCCCTGTTTATGCCCAA 862

Qy 1134 CTGCGAAATTGGTAAACCGATTATTGGAAACGAAATTTCCTTTGGACTGTG 1193

Db 863 CAAGGAAATTGGCTACGGATCTGAGAAATTCTCACCGATCTAGGAAACCTGAA 922

Qy 1194 TAAGGCTTGTGTATATGGGGAACTGGCATTTAATTCGACAATAATGATAC 1253

Db 923 TCGGCCTTGTGTTATGGCTGATATTGGTCAACGATTCGGCTTAACTGAGAC 982

Qy 1254 AAGGTGTATATATATGCTACTCTGGATGAACTGTTGAGCTATGGATATAGGAAAGAA 1313

Db 983 GTGGTGCCTACTGTAGTGCACCTCCAGACCTCTGGTATGTGAAAGAGGAA 1042

Qy 1314 AGATGGCTCAAACAGATCAAATCTAGTTGCTGGCATCTGGATA 1373

Db 1043 AGATGGTAACTGCTGAAAGTACTCTGGCTACTGTTGATGAACTGTTGAGCTGGATA 1102

Qy 1374 TGGGTTGGTCCAGAAATGAGAGTTATTCTGCGAGGAATGCCATCAAGGGAC 1433

Db 1103 TGGGATTGAACTTCGATGTTAGTGTGTTAGTGTGTTAGTGTGCTCGTG 1222

Qy 1494 AGTTTTAACTGCAATTATCTGTGTGTGAGCTGTTAGTGTGTTAGTGTGAG 1553

Db 1223 ACTTTGGGACTCTGAGTTGGGAGTTGGCTGAGTACCTCTACCTCTGAGA 1279

RESULT 3

US-09-976-594-786

Sequence 786, Application US/09976594

Patent No. 6673549

GENERAL INFORMATION:

APPLICANT: Furness, Michael